

Please delete the Abstract on page 10 in toto and replace with the following new Abstract:

Abstract

A leak detector includes an inlet, a high-vacuum pump, and a test gas detector, which is connected to the entry of the high-vacuum pump. A backing pump is connected to an outlet area of the high-vacuum pump, and a test gas line extends between the inlet of the leak detector and the backing pump, the test gas line being connected to the outlet area of the high-vacuum pump via a line section. In order to shorten the response time of the leak detector, the line and the backing pump are connected via separate connections to the outlet area of the high-vacuum pump.